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To:	Commissioner for Patents	From:	James R. Young
Company:	Patent and Trademark Office	Our Ref.:	MKSL50USU1
Serial No.:	09/815,376	Fax No.:	<u>(970) 492-1101</u>
Fax No.:	(571) 273-8300	Phone No.:	<u>(970) 492-1100</u>
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Please see attached Supplemental Amendment in the above patent application.

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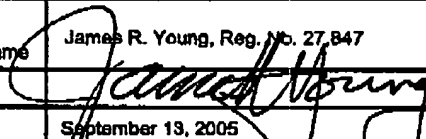
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PTO/SB/21 (02-04)

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/815,378	
	Filing Date	03/21/2001	
	First Named Inventor	Holcomb	
	Art Unit	3834	
	Examiner Name	Gregory J. Strimbu	
Total Number of Pages in This Submission	34	Attorney Docket Number	16458-050 (MKS1.50USU1)

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.62 or 1.63	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
Remarks Firm check in the amount of \$2,100.00 is enclosed.		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm or Individual name	James R. Young, Reg. No. 27,847	
Signature		
Date	September 13, 2005	

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I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.		
Typed or printed name	Stefan Bump	
Signature		Date 9-13-05

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/5B/17 (12-04v2)

Approved for use through 07/31/2006. OMB 0851-0032

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Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4918). FEE TRANSMITTAL For FY 2005		Complete If Known	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Application Number	09/815,376
TOTAL AMOUNT OF PAYMENT (\$) 2,100.00		Filing Date	3-21-2001
		First Named Inventor	Garry Holcomb
		Examiner Name	Gregory J. Strimbu
		Art Unit	3634
		Attorney Docket No.	16458-050 (MKSI.50USU1)

METHOD OF PAYMENT (check all that apply)

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims 38 - 20 or HP = 18 x 50 = 900
 HP = highest number of total claims paid for, if greater than 20.

Indep. Claims 4 - 3 or HP = 6 x 200 = 1200
 HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
<u>10</u>	<u>4</u>	<u>8</u>	<u>2000</u>	

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): _____

Fees Paid (\$) 2,100.00

SUBMITTED BY		
Signature	Registration No. (Attorney/Agent) 27,847	Telephone 970-492-1100
Name (Print/Type) James R. Young	Date September 13, 2005	

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Holcomb et al.	Examiner:	Gregory J. Strimbu
Serial No.:	09/815,376	Group Art Unit:	3634
Filed:	March 21, 2001	Docket No.	16458-050 (MKSL50USU1)
For:	COMBINATION DIFFERENTIAL AND ABSOLUTE PRESSURE TRANSDUCER FOR LOAD LOCK CONTROL		

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Stefan Bump**SUPPLEMENTAL AMENDMENT**

Sir:

Please amend the above-identified patent application, as follows:

Amendments to the Specification begins on page 2 of this paper.

Amendments to the Claims begin on page 3 of this paper.

Statement Of The Substance Of The Interview begins on page 29 of this paper.

Remarks/Arguments begin on page 30 of this paper.

09/16/2005 FRANKED1 00000018 501491 09015376

01 FC:1201 1200.00 DA
02 FC:1202 850.00 DA

[0031] As illustrated in the function block diagram in Figure 3, a power supply 91 for the absolute pressure transducer function 90 and a power supply 101 for the differential pressure transducer function 100 are connected to an external power source 82. In the absolute pressure transducer function 90, the absolute pressure sensor 20, such as a standard pirani sensor, which can sense absolute pressure accurately from about 100 torr down to about 10^{-4} torr, senses pressure in the load lock chamber 60. A pirani bridge circuit 92 produces a voltage signal that is indicative of the absolute pressure sensed by the pirani sensor 20. An analog process circuit 93 drives the bridge circuit 92 and amplifies and conditions the voltage signal from the bridge circuit 92. The relay control circuit 94 utilizes the voltage signal from the process circuit 93 to generate control signals to the interior door 62 actuator to open the door 62 when the pressure in the load lock chamber 60 reaches a certain minimum pressure to match or at least get close to the pressure at which the process chamber 70 (Figure 2) is operated. Alternatively, the control signal from relay control circuit **[[93]] 94** can be used to prevent the interior door 62 from being opened until the minimum threshold pressure in the load lock chamber 60 is reached. Also, as mentioned above, the relay control circuit 94 can also be configured to output a control signal to the throttle valve 66 controller (not shown) to speed up the vacuum pump 65 when the pressure in the load lock chamber gets pumped down to some selected intermediate pressure threshold so as to keep gas flow in the load lock chamber 60 to a minimum during pump down of the load lock chamber 60 when pressure is relatively high. Other absolute pressure sensors could also be used in this invention instead of the pirani sensor 20 described.